## ST 2SC3266

## NPN Silicon Epitaxial Planar Transistor

for power amplifier and power switching
applications.

The transistor is subdivided into three groups, $\mathrm{Y}, \mathrm{G}$ and L , according to its DC current gain.

On special request, these transistors can be manufactured in different pin configurations.


1. Emitter 2. Collector 3. Base

TO-92 Plastic Package

Absolute Maximum Ratings ( $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$ )

| Parameter | Symbol | Value | Unit |
| :--- | :---: | :---: | :---: |
| Collector to Base Voltage | $\mathrm{V}_{\text {CBO }}$ | 20 | V |
| Collector to Emitter Voltage | $\mathrm{V}_{\text {CEO }}$ | 20 | V |
| Emitter to Base Voltage | $\mathrm{V}_{\text {EBO }}$ | 6 | V |
| Collector Current | $\mathrm{I}_{\mathrm{C}}$ | 2 | A |
| Power Dissipation | $\mathrm{P}_{\text {tot }}$ | 750 | mW |
| Junction Temperature | $\mathrm{T}_{\mathrm{j}}$ | 150 | ${ }^{\circ} \mathrm{C}$ |
| Storage Temperature Range | $\mathrm{T}_{\text {stg }}$ | -55 to +150 | ${ }^{\circ} \mathrm{C}$ |

Characteristics at $\mathrm{T}_{\mathrm{a}}=25^{\circ} \mathrm{C}$

| Parameter | Symbol | Min. | Typ. | Max. | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DC Current Gain  <br> at $V_{C E}=3 \mathrm{~V}, \mathrm{I}_{\mathrm{C}}=500 \mathrm{~mA}$  <br>  Current Gain Group Y  <br>   G <br>    <br>    | $\begin{aligned} & \mathrm{h}_{\mathrm{FE}} \\ & \mathrm{~h}_{\mathrm{FE}} \\ & \mathrm{~h}_{\mathrm{FE}} \end{aligned}$ | $\begin{aligned} & 120 \\ & 200 \\ & 350 \end{aligned}$ |  | $\begin{aligned} & 240 \\ & 400 \\ & 700 \\ & \hline \end{aligned}$ | - |
| Collector Base Cutoff Current at $V_{C B}=20 \mathrm{~V}$ | $\mathrm{I}_{\text {cbo }}$ | - | - | 0.1 | $\mu \mathrm{A}$ |
| Emitter Base Cutoff Current at $\mathrm{V}_{\mathrm{EB}}=6 \mathrm{~V}$ | $\mathrm{I}_{\text {Ebo }}$ | - | - | 0.1 | $\mu \mathrm{A}$ |
| Collector Emitter Breakdown Voltage at $\mathrm{I}_{\mathrm{C}}=10 \mathrm{~mA}$ | $\mathrm{V}_{\text {(BR)CEO }}$ | 20 | - | - | V |
| Emitter Base Breakdown Voltage at $\mathrm{I}_{\mathrm{E}}=0.1 \mathrm{~mA}$ | $\mathrm{V}_{\text {(BR)EBO }}$ | 6 | - | - | V |
| Collector Emitter Saturation Voltage at $I_{C}=2 \mathrm{~A}, \mathrm{I}_{\mathrm{B}}=0.2 \mathrm{~A}$ | $\mathrm{V}_{\mathrm{CE} \text { (sat) }}$ | - | - | 0.8 | V |
| $\begin{aligned} & \text { Transition Frequency } \\ & \text { at } \mathrm{V}_{\mathrm{CE}}=5 \mathrm{~V}, \mathrm{I}_{\mathrm{C}}=0.5 \mathrm{~A} \end{aligned}$ | $\mathrm{f}_{\text {T }}$ | - | 270 | - | MHz |
| Collector Output Capacitance at $\mathrm{V}_{\mathrm{CB}}=10 \mathrm{~V}, \mathrm{f}=1 \mathrm{MHz}$ | Cob | - | 14 | - | pF |

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